

Figure 1

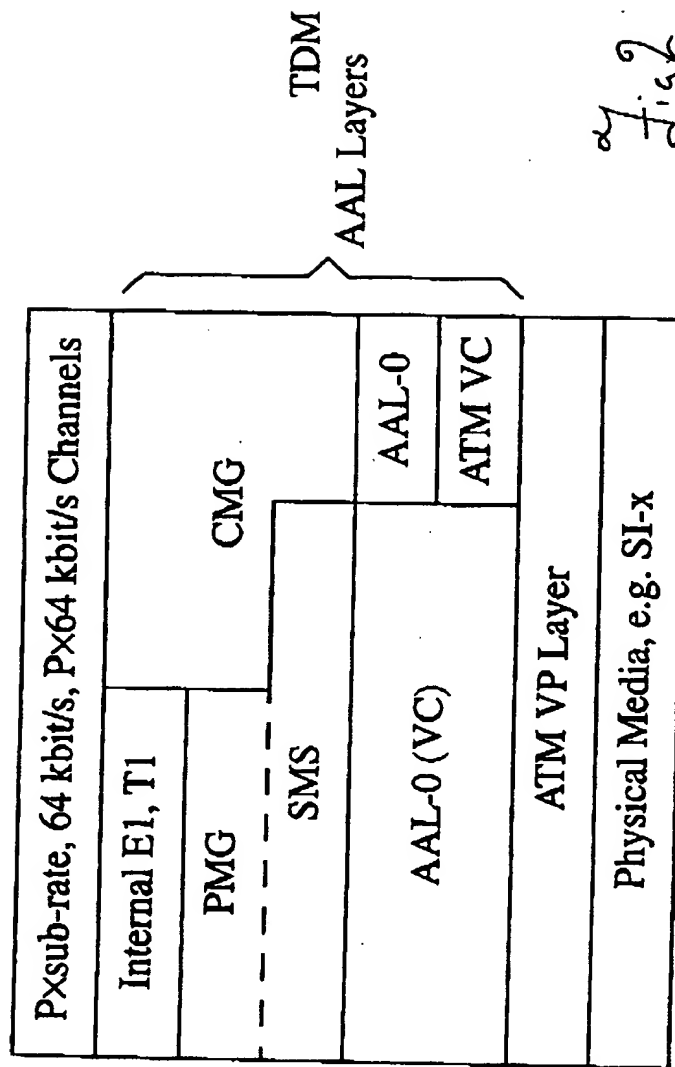
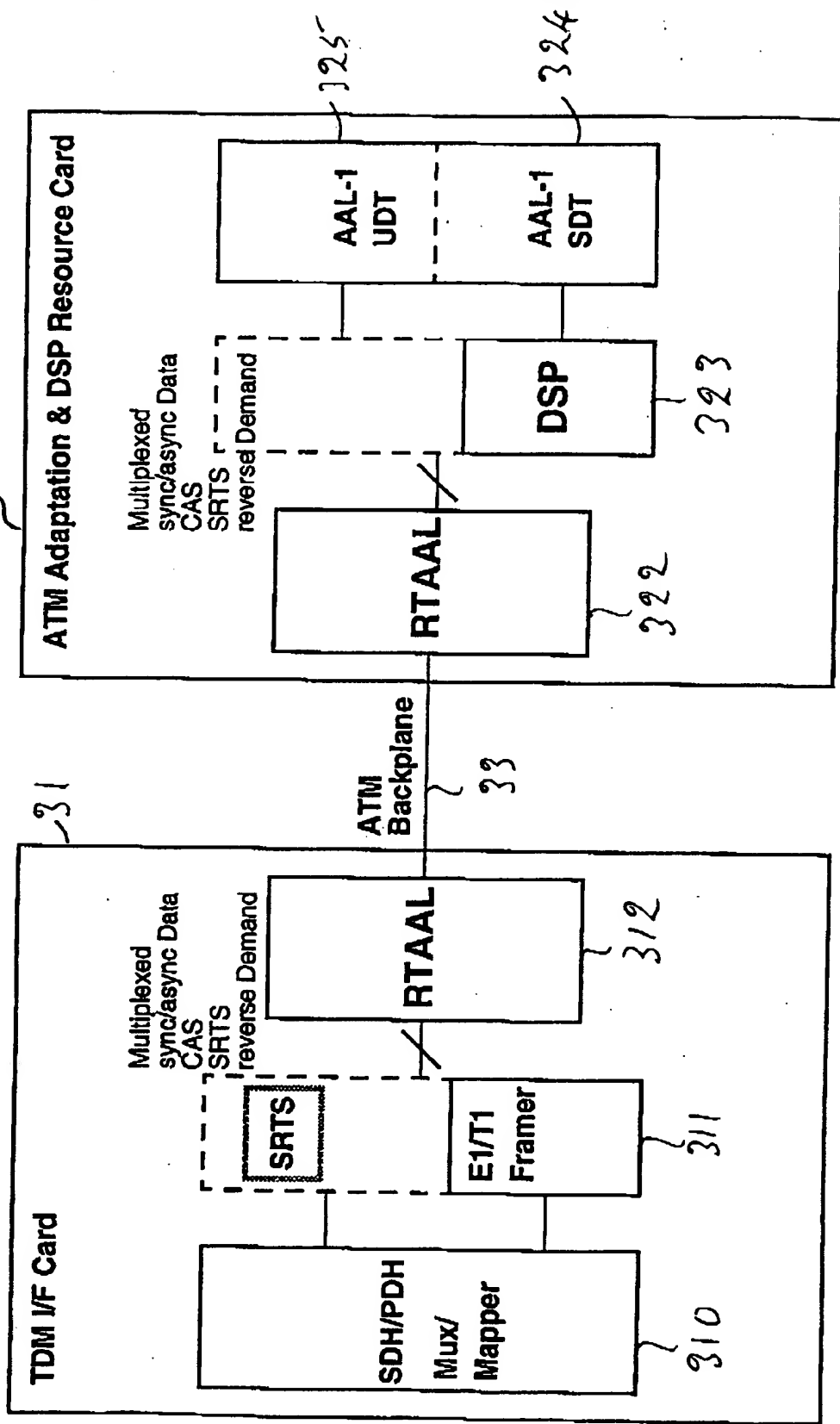


Fig. 2

Fig 3



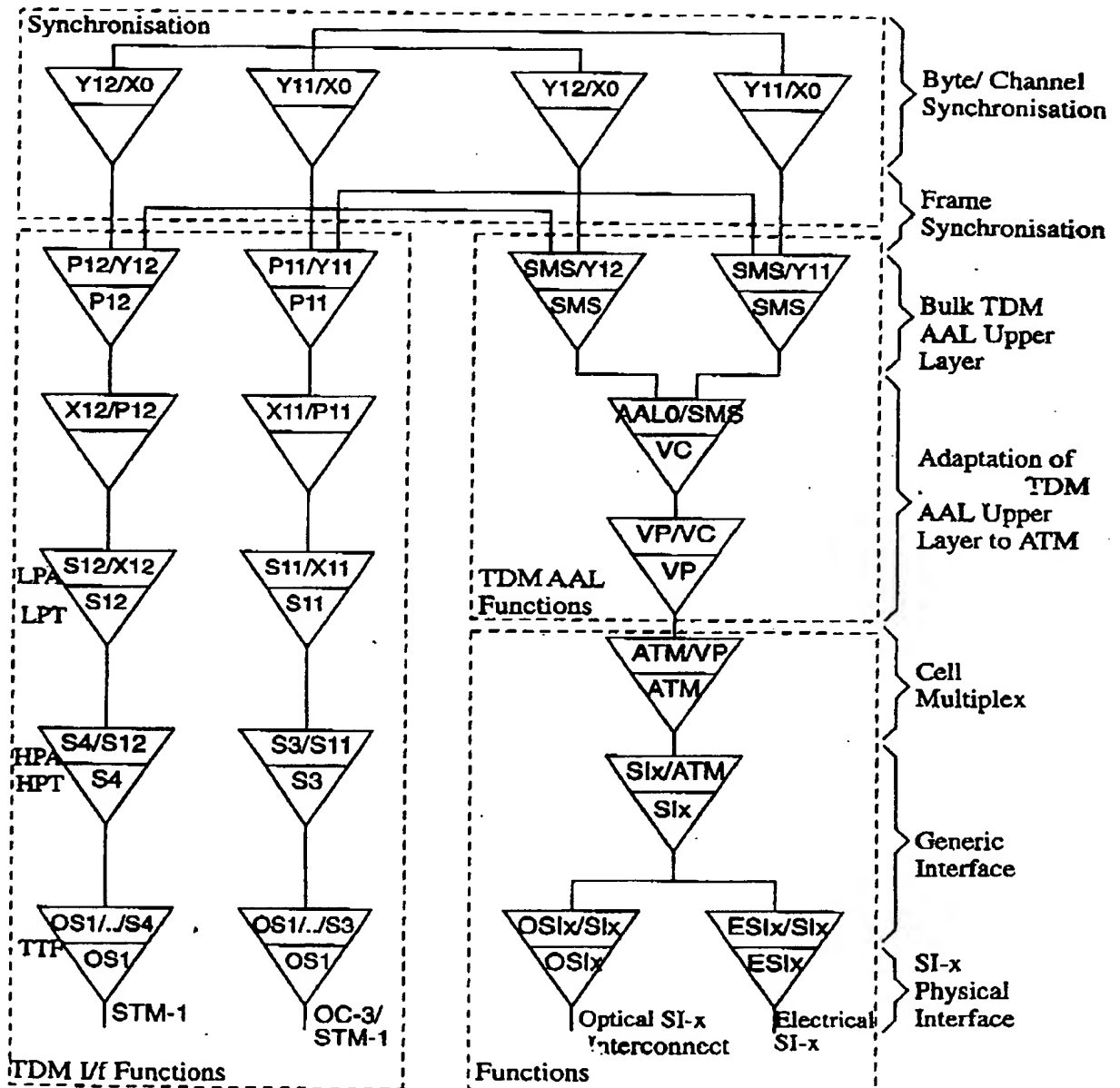


Fig. 4

a) Asynchronous Input Primary Multiplex Signals (E1s)

#A	(n-1) 31 0	(frame n) 31 0	(frame n+1) 31 0	(frame n+2)
#B	(frame n-1) 31 0	(frame n) 31 0	(frame n+1) 31 0	(frame n+2)
#C	0	(frame n-1) 31 0	(frame n) 31 0	(frame n+1) 31 0

b) Frame Synchronized Primary Multiplex Signals (E1s)

#A	31 0	(frame n) 31 0	(frame n+1) 31 0	
#B	31 0	(frame n) 31 0	(frame n+1) 31 0	
#C	31 0	(frame n-1) 31 0	(frame n) 31 0	

equipment frame synchronization reference

c) Byte Synchronized Primary Multiplex Signals (E1s)

#A	(n) 15 16	(n) 31:0	(n+1) 15 16	(n+1) 31:0	(n+2) 15 16	(n+2)
#B	(n) 7 8	(n) 31:0	7 8	(n+1) 31:0	7 8	(n+2)
#C	(n-1) 23 24	:0	(n) 23 24	:0	(n+1) 23 24	(n+1)

Pointer Value

d) Byte Synchronized E1s after Switching: null switch

#A	(n-2) 31 0	(n) 15:16	(n-1) 31 0	(n+1) 15:16	(n) 31 0	(n+2)
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timeslot integrity for P×64 kbit/s lost at sync boundary

e) Frame Slipping

for fast i/p, buffer store full

31 0	(frame n) 31 0	(frame n+2) 31 0	(frame n+3)
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frame n+1 removed

for slow i/p, buffer store empty

31 0	(frame n) 31 0	(frame n) 31 0	(frame n+1)
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frame n repeated

f) Byte Slipping

for fast i/p, buffer store full

(n) 15 16	(n) 31:0	(n+1) 15 17	(n+1) 31:0	(n+2) 15 17
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byte 16 of frame n+1 removed

Original Pointer Value

New Pointer Value

for slow i/p, buffer store empty

(n) 15 16	(n) 31:0	(n+1) 15 15	(n+1) 31:0	(n+2) 14 15
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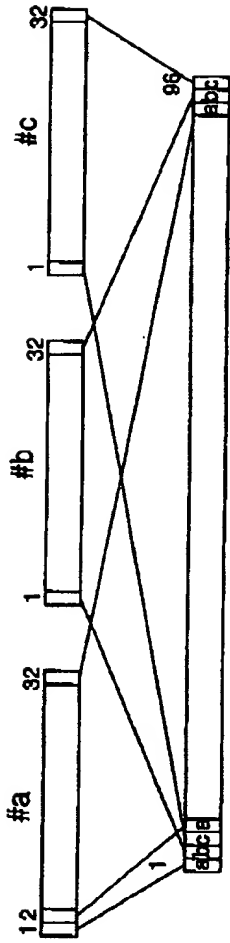
byte 15 of frame n+1 repeated

Original Pointer Value

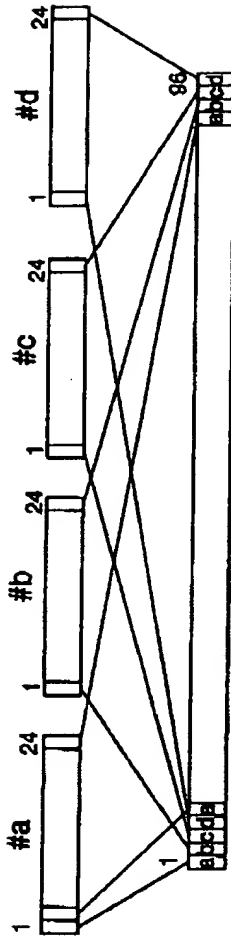
New Pointer Value

4:55

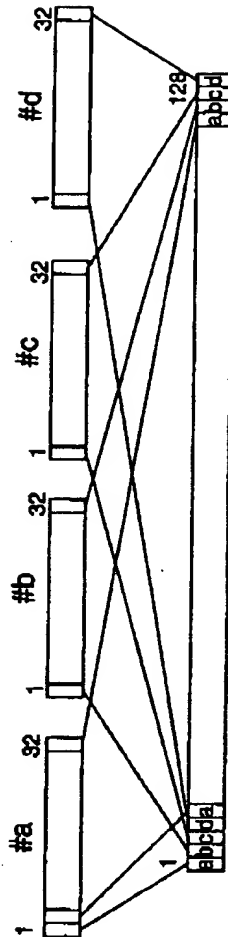
all the data from the input in the output stream. The data is not lost, it is just delayed.



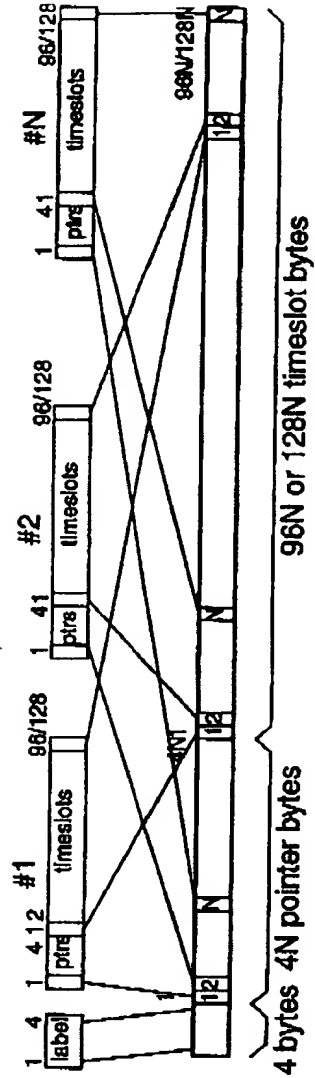
3x E1s
of 32 bytes / 125µs frame



Primary Multiplex Group-21
of 96 bytes / 125µs frame



Primary Multiplex Group-22
of 128 bytes / 125µs frame

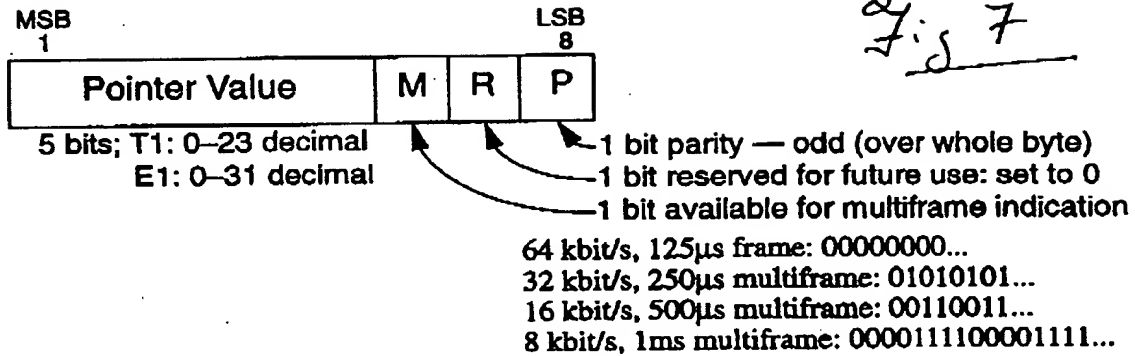


Nx Primary Multiplex Groups
of 96/128 timeslots + 4 pointer bytes
+ label field / 125µs frame

Secondary Multiplex Signal
of Nx100+4 bytes / 125µs frame
or Nx132+4 bytes / 125µs frame

4:6

Pointer Byte Format



Pointer Bytes for Primary Multiplex Group-21

Pointers for 4 \times T1s

1st byte		4th byte	
#a: 0-23	#b: 0-23	#c: 0-23	#d: 0-23

Pointers for 3 \times E1s

1st byte		4th byte	
fixed =24	#a: 0-31	#b: 0-31	#c: 0-31

↖ E1 group indication

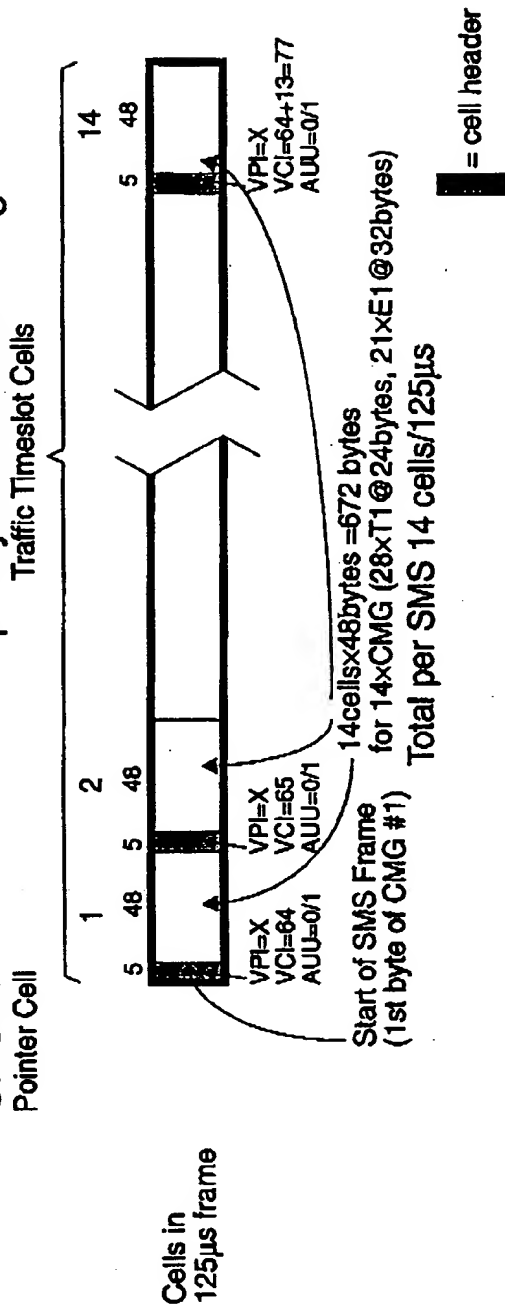
Pointer Bytes for Primary Multiplex Group-22

Pointers for 4 \times E1s

1st byte		4th byte	
#a: 0-31	#b: 0-31	#c: 0-31	#d: 0-31

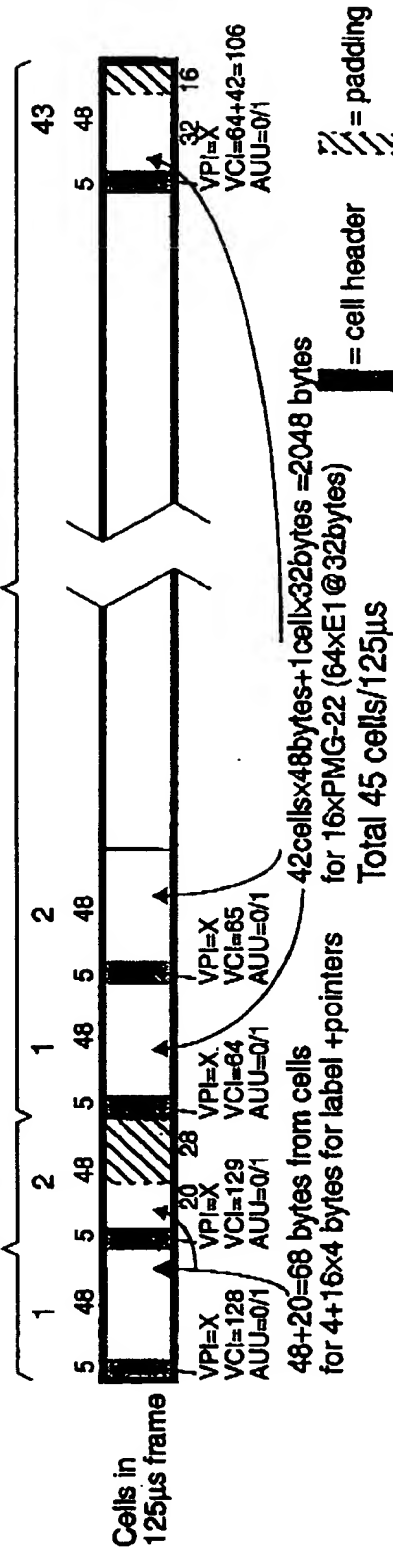


SMS in AAL-0 for T3's Capacity of timeslots using 14xCMG



[illegible]

Traffic Timeslot Cells



[illegible]

Overall Total 45 (+3) cells/125 μ s

SMS in AAL-0 for E3's Capacity of timeslots using 4xPMG-22

